

## **PARTNER REPORTS**

# **Cape Cod Pond and Lake Atlas**



**Prepared by  
The Cape Cod Commission Water Resource Office  
2003**

## **Synopsis:**

This Atlas brings together available information about Cape Cod ponds and lakes including historic and recent data in one comprehensive document. The atlas provides an overall assessment of the general health of specific Cape Cod ponds and lakes as well as regional trends on a town by town basis. The information in the Atlas provides a regional and local basis to help understand where Cape communities should prioritize future efforts for lake and pond management, protection, and stewardship.

Specific information includes:

- A basic primer on pond functions and legal issues
- A regional overview of pond water quality
- A town by town overview of pond water quality
- Selected review of water quality in individual ponds with maps and bathymetry

A copy of this report may be obtained after February 2003 by contacting:

**The Cape Cod Commission Water Resource Office**  
**3224 Main Street \* P.O. Box 226 \* Barnstable, MA 02630**  
**Phone: 508-362-382 \* Fax 508-362-3136 \* Email: [water@capecodcommission.org](mailto:water@capecodcommission.org)**



Association to Preserve Cape Cod  
PO Box 398, Barnstable, Massachusetts 02630-0398

## **Growth Management on Cape Cod: A Comparative Study of Local Bylaws**

March 18, 2002

This document consists of a comparative summary of municipal growth management regulations on Cape Cod. The methods vary from town to town, and these methods are grouped into general subject categories to allow for meaningful comparisons. The categories are: Open Space Protection, Growth Caps, Transfer of Development Rights, Districts of Critical Planning Concern, Village Centers and Design/Architectural Review, and Downzoning. Some of the non-regulatory approaches to growth management are also examined in lesser detail.

The Executive Summary highlights the findings of the comparisons between the municipalities, and the strengths and weaknesses associated with the use of these various regulatory tools on Cape Cod. A more detailed discussion of the findings follows by subject. A town-by-town summary is also provided. Several tables have been provided for comparisons in the final section.

This project was started in response to comments that such a town-by-town comparison was needed, made at the “Seeking Growth Solutions for Cape Cod” conference held in Barnstable on May 18, 2001. The conference was sponsored by the Association to Preserve Cape Cod, the Cape Cod Chamber of Commerce, and the Cape Cod Five Cent Savings Bank.

### **Methodology**

Planning representatives from each town were interviewed to review initial summaries of their respective zoning, subdivisions and natural resource regulations. Planners were also asked to provide comment on the effectiveness of these regulations, and to list the most critical growth issues their communities are facing. A final draft of this document was submitted to those interviewed for corrections and additions, and the corrections received were incorporated into the final document.

**This report is available on the APCC’s website, at:  
<http://www.apcc.org/publications/growthmanagement.html>**

# **Cape Cod Priority Ponds Project**

## *A Land Conservation Guide for Cape Cod's Freshwater Ponds*



*Muddy Pond, Barnstable*

**Prepared by**  
**The Compact of Cape Cod Conservation Trusts, Inc.**  
**2002**

### **Synopsis:**

This guide was prepared to assist public and private land conservation programs on Cape Cod. The focus of the guide is the identification of the remaining undeveloped land parcels adjoining fresh water ponds. The primary goal of the project is to assist in the protection of the most important remaining undeveloped pond shore areas on Cape Cod for water quality, conservation and passive recreation purposes.

The specific objectives of the project include:

- To identify, map and rank all the remaining pond shore parcels on Cape Cod (both undeveloped and under-developed)
- To develop protection strategies for the top priority properties, particularly those surrounding Great Ponds and Coastal Plain Ponds.
- To conduct targeted outreach for landowners controlling priority parcels to provide information on land values and identify protection options.
- To provide a digital database containing maps and a parcel-specific database to support ongoing land protection and water quality monitoring activities.
- To further cooperation among the Commonwealth's environmental agencies, town Land Bank committees, and local non-profit land trusts in protecting the public interest in freshwater ponds.

A copy of this report may be obtained by contacting

**The Compact of Cape Cod Conservation Trusts, Inc.**  
3239 Main Street \* P.O. Box 443 \* Barnstable, MA 02630  
Phone: 508-362-3422 \* Fax: 508-362-4480 \* Email: [compactr@cape.com](mailto:compactr@cape.com)



# **The Estuaries Project - Southeastern Massachusetts Embayment Restoration**

**Massachusetts Department of Environmental Protection and  
School of Marine Science and Technology, University of Massachusetts-Dartmouth**

Rapid population growth over several decades has created an abundance of nutrients that have leached into the estuaries through ground and surface waters. Nutrients, such as phosphorus and nitrogen, act as a fertilizer to aquatic plants. The result: changes in water quality and the buildup of invasive weed and algal growth causing fish kills, closed beaches, destroyed productive shellfish areas and creating aesthetically displeasing waters that adversely affect the valuable tourist industry and coastal property values.

The Massachusetts Estuaries Project effort will begin to fix this problem by determining all of the factors specific to each estuary that are causing the problem. Project partners will determine the geographic area contributing nutrients to a specific estuary, determine what the nutrient sources are, what the nutrient load is, and how great a nutrient load the estuaries can tolerate without dramatically changing their character and usages. In most cases, returning the estuaries to the water quality condition that support sensitive shellfish habitats and lush eel grass beds, it will be necessary to remove a significant percentage of the nutrient loadings coming from an estuary's watershed. Nutrient removal may come primarily in the form wastewater treatment and secondarily through stormwater management programs including of limited use of lawn fertilizers. In some scenarios, changing the water flow within an estuary to increase flushing may compliment nutrient reduction and removal efforts.

This project will provide water quality, nutrient loading, and hydrodynamic information for 89 estuaries in Southeastern Massachusetts. This information will be combined through the use of a linked watershed/estuary model that will predict the water quality changes that will result from land use management decisions. Over the next six years a report for each of the 89 estuaries will evaluate several water quality conditions and how that relates to the health of the estuary and the land use changes necessary to bring about that improvement. This project is a collaborative effort by two state agencies, the Executive Office of Environmental Affairs (through the Department of Environmental Protection) and the University of Massachusetts's School of Marine Science and Technology (SMAST) and is subsidized by funding that allows communities to undertake this evaluation at approximately 40 percent of the actual cost.

**For more information about this project, please visit the website**

**<http://www.state.ma.us/dep/smerp/smerp.htm>**

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